

**U.S. Department of the Interior • Bureau of Mines****MINERAL INDUSTRY SURVEYS**

810 7th Street, NW

Washington, DC 20241

For information call:

J. M. Lucas (Gold Specialist) (202) 501-9417
R. G. Reese (Silver Specialist) (202) 501-9413
D. E. Penn (Data, Gold) (202) 501-9455
K. J. Bacon (Data, Silver) (202) 501-9452

For MINES-DATA computer bulletin board call:

(202) 501-0373 (2400,N,8,1) for access
(202) 501-0406 for technical assistance

For MINES Faxback call: (412) 894-4088**Gold and Silver Monthly****GOLD AND SILVER IN OCTOBER 1993**

Domestic mines produced 27 metric tons of gold and 118 metric tons of silver in October, according to the U.S. Bureau of Mines.

Although U.S. primary silver production during October was unchanged from the revised figure for September, it was 14% lower than in October 1992. Total U.S. silver imports for consumption for the period January through September decreased 19% from those of the comparable period of 1992. For 1993 through September, the countries shipping the largest quantities of silver to the United States were Canada (764 metric tons), Mexico (731 metric tons), Peru (315 metric tons), and the United Kingdom (282 metric tons). U.S. silver exports for January through September were 9% lower than for the comparable period of 1992. The countries receiving the largest quantities of silver from the United States during the 9-month period were Canada (434 metric tons), the United Kingdom (211 metric tons), and the United Arab Emirates (95 metric tons).

Homestake Mining Co. announced that on October 15 the two millionth troy ounce (62.2 metric tons) of gold was poured at its McLaughlin Mine in Lake County, CA. The first gold bar was poured at McLaughlin in March 1985 and the one millionth ounce was poured in March 1990. The large open pit facility, located near Lower Lake, CA, was reportedly the world's

first gold mine to recover gold from refractory ores using a unique pressure oxidation circuit utilizing autoclaves. During the first 6 months of 1993, the mine, employing a work force of about 330 people, recovered 4,780 kg (153,500 ounces) of gold. Gold production in 1992 amounted to over 9,050 kg (291,000 ounces).

According to Jewelers Circular Keystone, the Jewelers Vigilance Committee (JVC), an industry watchdog group based in New York, has reached agreement with the London Assay Office in Great Britain to hallmark precious metal jewelry made in the United States. The service reportedly will help to deter underkarating and make it easier for U.S. manufacturers to compete in the international jewelry market. The JVC and other organizations have investigated the possibility of creating a central assaying lab in the United States but the projected cost was prohibitive, with the cost of necessary antipollution equipment contributing greatly to the overall total. The London Assay Office of the Worshipful Company of Goldsmiths has reportedly been performing assays since 1300.

The China Daily Business Weekly reported on October 18, that since September 1, when the price paid for gold to Chinese gold producers by the People's Bank of China was allowed to rise to international levels, the amount of gold sold to the central bank was nearly

double the amount sold during the previous 8 months. All gold produced in China must be sold to the central bank. About one-third of the nation's 600 gold producers reportedly lost money last year as a result of the low fixed state purchase price. To encourage greater gold production, the Chinese Government reportedly has initiated other reforms, including cancellation of a variety of subsidies and exemptions and adoption of special incentives designed to help the Chinese gold industry make a smooth transition to a market economy. The same source reported that data long considered to be state secrets, such as good production and reserve data, as well as individual mine performance may soon be revealed to the public.

In late October, The Interfax Business Report, citing the chairman of the Russian Committee for Precious Metals and Stones (Roskomdragmet) reported that the Russian Government plans to establish a domestic gold exchange by the end of the year. The purpose of the exchange apparently would be to provide an outlet for the 10% of production which regional mining operations are allowed to dispose of on their own behalf. Exports of gold will remain a state monopoly. In November, a presidential decree was reportedly being drafted to further liberalize the state-controlled gold market. Also, it was reported that the decades-old regulations prohibiting Russians from buying and holding gold were effectively lifted in September, when the government began issuing gold-backed bonds redeemable in gold or cash. The redeemed gold cannot, however, be sold abroad. The proceeds of the bonds would reportedly be used to aid in reducing Russia's budget deficit.

Production was begun recently at Newmont Mining Corp.'s 38% held Minera Yanacocha gold mine, near Cajamarca in northwestern Peru. Current production, from three open pits, is expected to amount to about 1,870 kg (60,000 ounces) in 1993; production thereafter will be at a rate of about 6,850 kg (220,000 ounces) per year. According to Newmont, Minera Yanacocha

contains a total of about 40.4 metric tons (1.3 million ounces) of reserves and about 180 metric tons (5.7 million ounces in non-reserve mineralization).

Update:

On November 16, Newmont Mining Corp. announced that ground had been broken at its new Zarafshan-Newmont Joint Venture project in the Republic of Uzbekistan. The joint venture will reportedly produce a minimum of about 155 metric tons (5 million ounces of gold) over a 16-year period from low-grade ore stockpiled over a 60-year period from the Muruntaun Mine, the world's largest open pit gold mine. The gold will be produced by heap leaching using technology supplied by Newmont. Production is scheduled to begin in early 1995 at a rate of about 14 metric tons (450,000 ounces) annually.

On December 9, the Boards of Directors of Newmont Mining Corp. and its 90.1%-owned subsidiary, Newmont Gold Co., announced their approval of a plan which would combine the assets, gold reserves and operations of the two companies. The combination is subject to approval by Newmont Gold's minority share holders and, if approved, could be consummated as early as February. The de facto result would reportedly be one worldwide gold mining entity with two identical sets of shares traded publicly. According to the company, the combined gold reserves of Newmont Gold and Newmont Mining will approximate 809 mt (26 million ounces) at the end of 1993, and it is projected that the combined company will have worldwide production approaching 62 metric tons (2 million ounces) of gold annually by 1996. Separately, Newmont Mining announced in its third Quarter Report for 1993 that Newmont Gold and Newmont Mining had received a patent on their process to bioleach low-grade gold ore containing sulfidic constituents that render such material unsuitable for normal dump leaching. The process reportedly employs naturally-occurring bacteria.

BLM Library
Denver Federal Center
Bldg. 50, OC-521
P.O. Box 25047
Denver, CO 80225

TABLE 1
MINE PRODUCTION OF RECOVERABLE GOLD IN THE UNITED STATES

(Kilograms)

State	1992 1/	1992p/				1993		
		October	November	December	January-December	January	February	March
Arizona -----	6,656	529	526	521	6,193	441	424	441
California -----	33,335	2,598	2,553	2,559	31,300	r/2,938	r/2,834	r/2,889
Idaho -----	3,177	280	290	305	3,219	r/345	r/332	r/343
Montana -----	13,994	1,129	1,121	1,160	14,697	r/1,433	r/1,360	r/1,659
Nevada -----	203,165	15,244	16,147	14,591	181,898	r/15,514	r/16,241	r/16,739
Other States2/ --	68,796	4,590	4,418	4,787	58,688	r/4,684	r/4,730	r/5,340
Total3/ ----	329,124	24,369	25,052	23,923	295,995	r/25,353	r/25,920	r/27,412

1993								
	April	May r/	June r/	July	August r/	September r/	October	January-October3/
Arizona -----	430	181	166	131	155	181	176	2,726
California -----	r/2,898	2,954	2,788	r/2,904	3,040	2,918	3,044	29,207
Idaho -----	r/327	323	404	r/396	345	371	371	3,557
Montana -----	r/1,852	1,843	1,768	r/1,707	1,609	1,740	1,804	16,776
Nevada -----	r/16,794	16,807	16,915	r/16,908	16,739	16,714	16,847	166,218
Other States2/ --	r/5,661	5,781	6,090	r/6,151	5,577	5,154	4,791	53,958
Total3/ ----	r/27,963	27,889	28,133	r/28,197	27,464	27,077	27,033	272,439

p/Preliminary. r/Revised.

1/Includes annual reporters.

2/Includes Alaska, Colorado, New Mexico, South Carolina, South Dakota, Utah, and Washington.

3/Data may not add to totals shown because of independent rounding.

U.S. mine production of gold by month

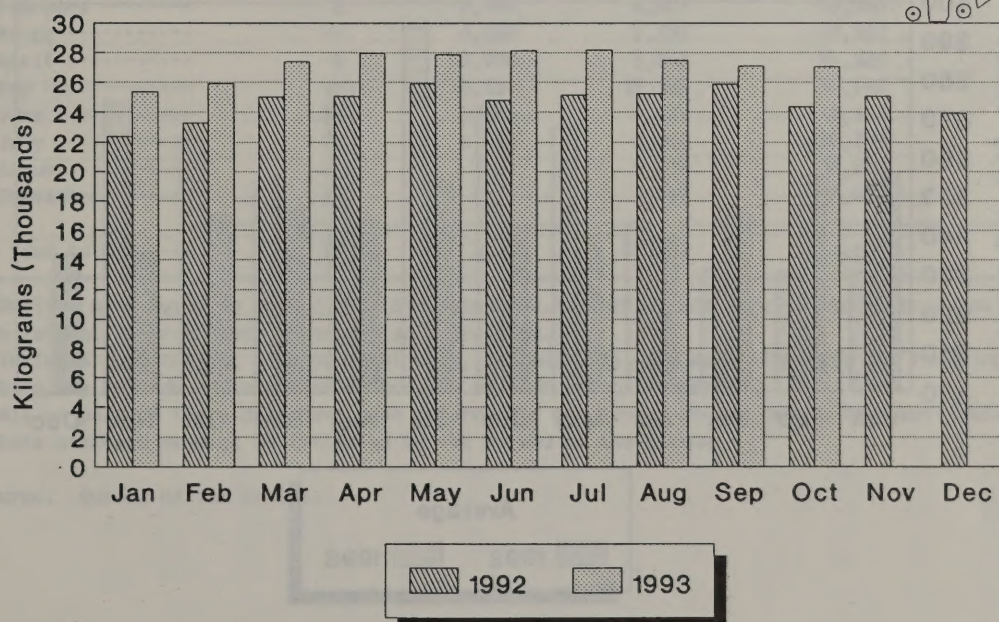


TABLE 2
SELECTED PRICES, GOLD BULLION

(Dollars per troy ounce)

	Engelhard Industries			Handy and Harman	London final
	Low/date	High/date	Average	Average	Average
1992:					
October -----	339.42/28	351.75/08	345.62	344.38	344.38
November -----	331.56/10	340.73/02	336.30	335.08	335.02
December -----	333.00/31	339.88/17	335.78	334.66	334.80
Year -----	331.56 (Nov. 10)	360.86 (July 28)	344.97	343.74	343.73
1993:					
January -----	328.76/13	332.11/26	330.22	329.01	329.01
February -----	328.81/26	333.21/11	330.56	329.35	329.31
March -----	327.30/10	339.02/31	331.29	330.07	330.08
April -----	337.51/01	356.85/29	343.19	341.91	342.15
May -----	355.50/05	383.20/19	367.93	366.72	367.18
June -----	364.27/14	379.74/30	373.17	371.89	371.89
July -----	380.29/01	403.08/30	393.73	392.41	392.19
August -----	368.87/13	406.94/02	379.72	378.46	378.84
September -----	344.93/14	370.53/02	356.10	354.85	355.28
October -----	r/353.00/04	375.79/21	365.45	364.18	364.18
November -----	364.27/02	379.69/22	374.77	373.49	373.83
Year to date	327.30 (Mar. 10)	406.94 (Aug. 2)	358.74	357.49	357.63

r/Revised.

Source: Metals Week.

Selected prices, gold bullion Engelhard Industries

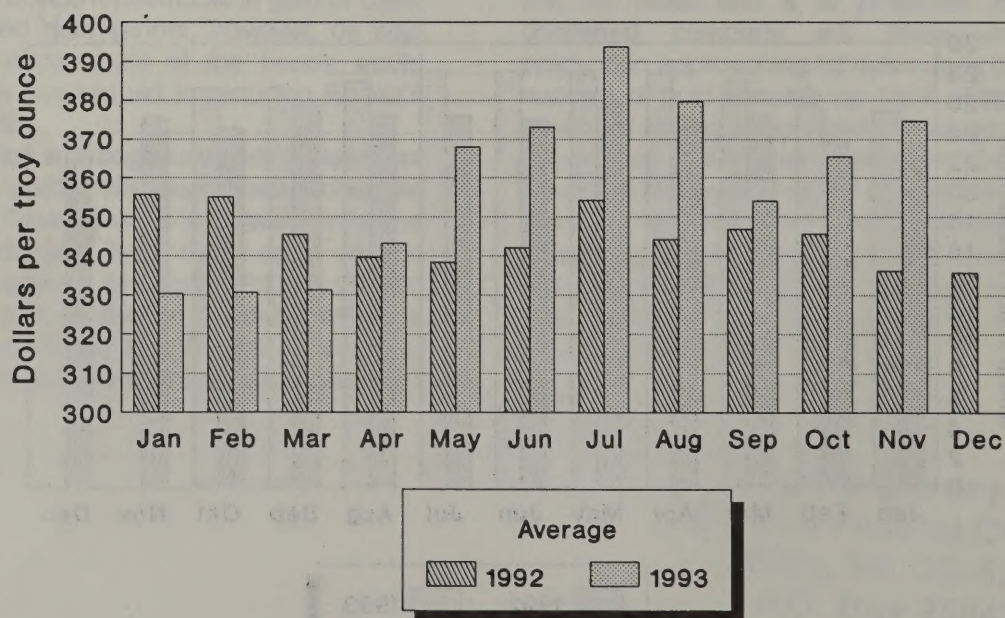


TABLE 3
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF GOLD BY MONTH^{1/}

(Kilograms)

Period	Ores and concentrates ^{2/}	Waste and scrap	Dore and precipitates	Refined bullion	Total ^{3/}
Imports					
1992:					
September -----	4	699	1,635	8,819	11,157
October -----	43	1,023	2,591	11,308	14,965
November -----	21	949	834	10,662	12,466
December -----	98	1,136	1,207	8,445	10,885
Year -----	350	15,649	17,092	141,251	174,340
1993:					
January -----	71	2,725	391	3,753	6,939
February -----	82	2,157	702	8,591	11,533
March -----	60	3,211	867	11,209	15,347
April -----	89	1,498	1,334	10,297	13,219
May -----	53	880	955	28,941	30,829
June -----	6	1,628	1,625	13,834	17,092
July -----	4/225	1,491	1,136	7,963	10,816
August -----	80	2,909	1,309	10,495	14,792
September -----	162	1,856	741	11,710	14,469
Year to date ---	828	18,355	9,060	106,793	135,036
Exports					
1992:					
September -----	1	4,820	3,737	9,192	17,750
October -----	2	4,434	4,481	46,148	55,065
November -----	--	3,043	5,354	33,565	41,962
December -----	3	4,079	3,695	39,372	47,149
Year -----	30	60,968	51,008	256,846	368,850
1993:					
January -----	--	3,013	7,168	57,501	67,683
February -----	2	3,744	4,421	16,560	24,723
March -----	--	4,069	7,762	47,502	59,333
April -----	4	3,018	5,846	55,820	64,688
May -----	--	3,139	15,333	54,590	73,062
June -----	24	5,648	4,127	18,146	27,945
July -----	23	6,425	3,842	4/39,385	49,675
August -----	21	(5/)	5,250	39,077	(5/)
September -----	23	(5/)	5,402	83,054	(5/)
Year to date ---	97	(5/)	59,151	411,635	(5/)

1/Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold excluded.

2/Includes gold content of base metal ores, concentrates, and matte imported for refining.

3/Data may not add to totals shown because of independent rounding.

4/All or part of these data have been referred to the Bureau of the Census for verification.

5/Data withheld pending verification by the Bureau of the Census.

Source: Bureau of the Census.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF GOLD BY COUNTRY,
IN SEPTEMBER 1993 1/

(Kilograms)

Country	Ores and concentrates ^{2/}	Waste and scrap	Dore and precipitates	Refined bullion	Total ^{3/}
Imports					
Australia -----	--	--	--	200	200
Canada -----	(4/)	114	548	9,918	10,580
Dominican Republic --	--	204	--	--	204
Ecuador -----	--	--	--	269	269
Germany -----	--	700	--	3	703
Malaysia -----	--	209	--	--	209
Mexico -----	161	465	11	55	692
Switzerland -----	--	--	--	1,021	1,021
Other -----	1	167	182	243	594
Total ^{3/} -----	162	1,856	741	11,710	14,469
Exports					
Belgium -----	21	329	--	--	350
Canada -----	2	(5/)	1,248	341	(5/)
France -----	--	--	1,573	252	1,824
Germany -----	--	807	16	1,517	2,340
Hong Kong -----	--	2,955	--	3,886	6,841
Italy -----	--	79	118	3	200
Mexico -----	--	--	--	339	339
Sweden -----	--	(5/)	8	--	(5/)
Switzerland -----	--	674	1,969	6/26,603	29,246
Taiwan -----	--	--	--	1,124	1,124
United Kingdom -----	--	6,657	445	6/48,863	55,965
Other -----	--	11	24	128	161
Total ^{3/} -----	23	(5/)	5,402	83,054	(5/)

1/Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold excluded.

2/Includes gold content of base metal ores, concentrates, and matte imported for refining.

3/Data may not add to totals shown because of independent rounding.

4/Less than 1/2 unit.

5/Data withheld pending verification by the Bureau of the Census.

6/All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 5
MINE PRODUCTION OF RECOVERABLE SILVER IN THE UNITED STATES

(Metric tons)

State	1992 1/	1992p/				1993		
		October	November	December	January-December	January	February	March
Arizona -----	165	12	15	16	153	13	11	14
California -----	18	1	1	1	15	1	1	1
Colorado -----	12	1	1	1	13	1	1	1
Idaho -----	254	17	15	17	255	17	17	16
Missouri -----	32	3	2	2	25	2	2	2
Montana -----	197	16	14	17	195	14	14	15
Nevada -----	614	45	45	56	586	82	70	81
Other States2/ --	511	42	34	42	498	40	38	47
Total3/ ----	1,804	138	128	153	1,740	170	154	175

1993								
	April	May	June	July	August	September	October	January-October3/
Arizona -----	13	12	12	13	13	14	15	130
California -----	2	1	1	2	2	2	1	15
Colorado -----	1	1	1	1	1	1	1	11
Idaho -----	17	16	18	14	17	15	15	161
Missouri -----	2	2	1	1	2	2	2	18
Montana -----	8	16	8	9	8	8	8	109
Nevada -----	55	54	70	61	r/55	r/50	51	630
Other States2/ --	30	26	27	24	22	26	23	302
Total3/ ----	129	128	139	125	r/119	r/118	118	1,375

p/Preliminary. r/Revised.

1/Includes annual reporters.

2/Includes Alaska, Michigan, New Mexico, New York, South Carolina, South Dakota, Utah, and Washington.

3/Data may not add to totals shown because of independent rounding.

U.S. mine production of silver by month

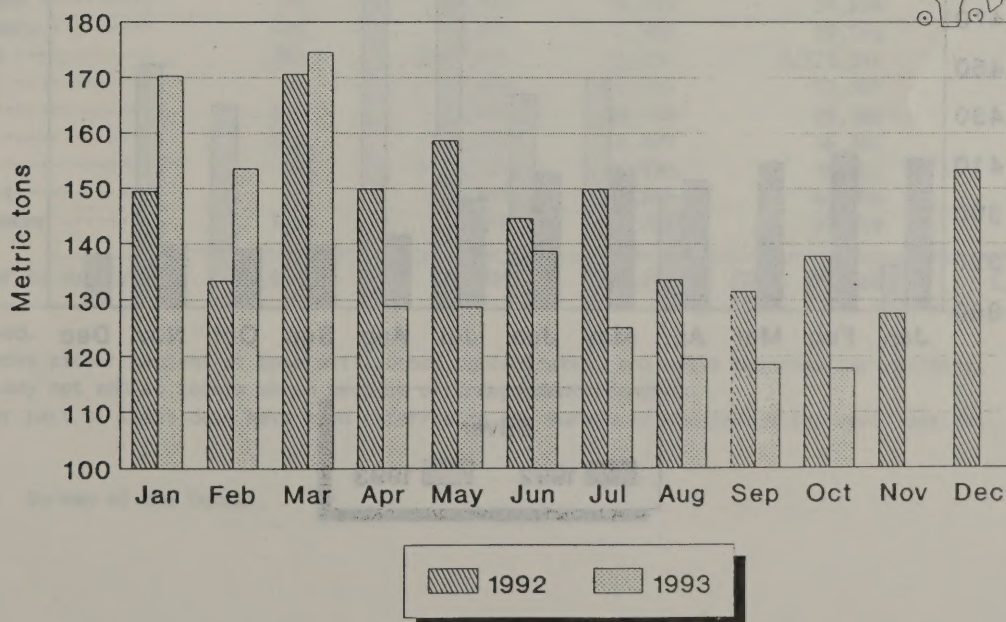


TABLE 6
SILVER: SELECTED PRICES

(Dollars per troy ounce)

	Handy & Harman, New York			London Spot		
	Low/date	High/date	Average	Low/date	High/date	Average
1992:						
October -----	3.69/13	3.79/05	3.74	3.70/14	3.81/21	3.74
November -----	3.64/10	3.93/05	3.76	3.69/11	3.91/06	3.77
December -----	3.68/09,22	3.76/18	3.71	3.69/23	3.76/18	3.73
Year -----	3.64 (Aug. 26, Nov. 10)	4.32 (Jan. 16)	3.94	3.65 (Aug. 26)	4.33 (Jan. 17)	3.95
1993:						
January -----	3.64/04	3.72/12	3.68	3.65/05	3.70/26	3.68
February -----	3.54/25	3.72/11	3.64	3.57/26	3.77/11	3.66
March -----	3.55/08	3.72/26	3.65	3.56/09	3.72/26	3.65
April -----	3.79/07	4.34/30	3.96	3.79/07	4.36/29	3.97
May -----	4.27/04	4.66/28	4.45	4.25/05	4.74/19	4.46
June -----	4.19/14	4.66/28	4.38	4.22/14	4.62/01	4.37
July -----	4.95/14	5.37/30	5.04	4.86/05	5.30/30	5.02
August -----	4.60/06	5.35/02,03	4.81	4.59/13	5.42/02	4.84
September -----	3.99/13	4.81/01	4.17	3.92/14	4.83/01	4.22
October -----	4.04/04	4.51/21	4.33	4.05/05	4.51/21	4.34
November -----	4.17/02	4.70/19	4.50	4.21/02	4.73/22	4.53
Year to date -	3.54 (Feb. 25)	5.37 (Jul. 30)	4.24	3.56 (Mar. 09)	5.42 (Aug. 02)	4.25

Source: Metals Week.

Handy and Harman Average Price

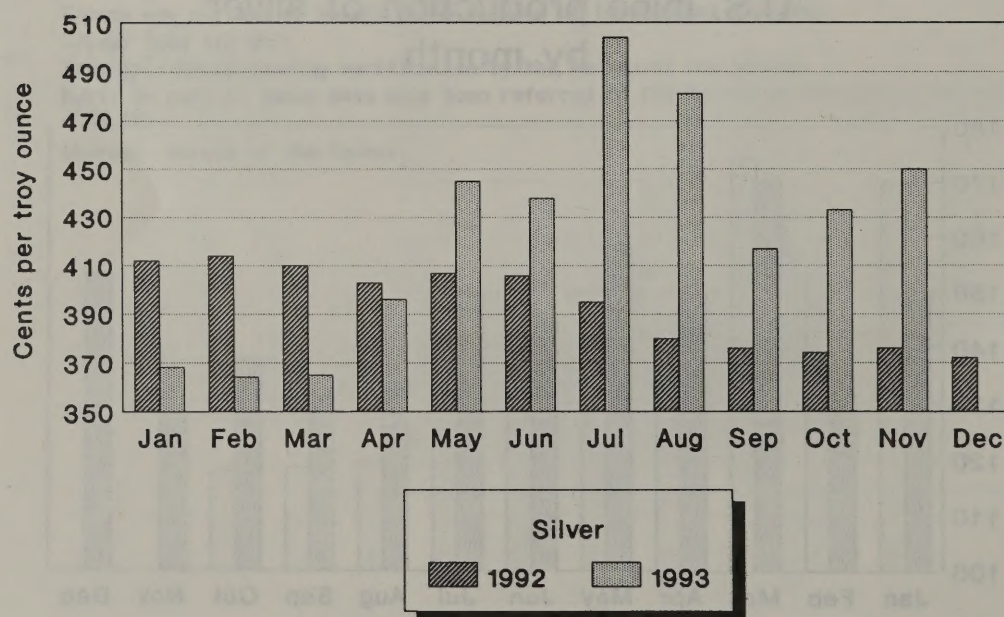


TABLE 7
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF SILVER BY MONTH

(Kilograms)

Period	Ore and concentrates ^{1/}	Waste and scrap	Dore and precipitates	Refined bullion	Total ^{2/}
Imports					
1992:					
September -----	1,930	86,021	26,834	192,397	307,183
October -----	618	213,040	41,205	255,339	510,201
November -----	750	146,319	30,942	203,270	381,280
December -----	1,024	261,624	36,342	210,665	509,656
Year -----	25,352	1,774,085	528,715	2,661,622	4,989,774
1993:					
January -----	455	140,042	19,290	187,475	347,263
February -----	--	65,136	44,343	3/250,527	360,006
March -----	1,355	66,372	34,151	3/197,609	299,487
April -----	1,109	102,869	23,852	3/226,694	r/354,524
May -----	2,048	134,778	32,895	185,142	351,863
June -----	1,264	107,998	28,779	127,276	265,317
July -----	1,048	136,331	20,098	165,642	323,119
August -----	565	140,506	14,923	153,315	309,309
September -----	21,457	108,220	10,542	170,843	311,061
Year to date ^{2/} -	29,301	1,002,251	228,873	1,664,523	2,921,949
Exports					
1992:					
September -----	38	58,244	7,765	40,005	106,051
October -----	2,399	76,495	8,948	63,452	151,294
November -----	872	53,865	4,944	79,444	139,125
December -----	476	76,009	4,734	26,843	108,062
Year -----	8,505	745,221	88,894	910,587	1,753,207
1993:					
January -----	28	91,316	15,910	39,976	147,230
February -----	993	65,998	8,930	39,046	114,968
March -----	283	3/101,031	15,234	3/123,094	239,642
April -----	83	42,088	8,564	72,897	123,631
May -----	209	77,934	12,486	75,182	165,812
June -----	278	69,702	8,879	36,303	115,163
July -----	--	68,597	9,596	16,045	94,237
August -----	--	86,449	8,881	41,596	136,926
September -----	173	58,876	6,733	27,219	93,001
Year to date ^{2/} -	2,047	661,991	95,212	471,360	1,230,610

r/Revised.

1/Includes silver content of base metal ores, concentrates, and matte imported for refining.

2/Data may not add to totals shown because of independent rounding.

3/All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF SILVER BY COUNTRY
IN SEPTEMBER 1993 1/

(Kilograms)

Country	Ores and concentrates2/	Waste and scrap	Dore and precipitates	Refined bullion	Total3/
Imports					
Canada -----	847	2,366	--	55,397	58,610
Chile -----	--	287	7,502	41	7,830
Estonia -----	--	17,880	--	--	17,880
Germany -----	--	20,491	--	--	20,491
Japan -----	--	4,112	--	--	4,112
Malaysia -----	--	14,317	--	--	14,317
Mexico -----	20,598	513	1,677	68,420	91,207
Netherlands -----	12	16,325	--	--	16,337
Peru -----	--	--	698	46,985	47,684
Taiwan -----	--	19,000	--	--	19,000
United Kingdom -----	--	12,745	--	--	12,745
Other -----	--	183	664	--	847
Total3/ -----	21,457	108,220	10,542	170,843	311,061
Exports					
Belgium -----	--	4,311	--	--	4,311
Canada -----	155	34,694	--	--	34,849
China -----	--	1,862	--	--	1,862
France -----	--	--	5,140	--	5,140
Germany -----	--	5,833	--	--	5,833
Hong Kong -----	--	186	--	10,297	10,483
Japan -----	--	391	34	16,027	16,451
Sweden -----	--	3,268	--	--	3,268
Switzerland -----	--	3,762	569	--	4,331
United Kingdom -----	--	3,505	991	62	4,558
Uruguay -----	--	--	--	759	759
Other -----	18	1,063	--	75	1,155
Total3/ -----	173	58,876	6,733	27,219	93,001

1/Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary silver excluded.

2/Includes silver content of base metal ores, concentrates, and matte imported for refining.

3/Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

U.S. Library
The New Faculty Center
Box 20, C-20
U.S. 504 1504
Boulder, CO 80502

U.S. Department of the Interior
Bureau of Mines
810 7th Street, N.W., MS #9800
Washington, D.C. 20241-0001

AN EQUAL OPPORTUNITY EMPLOYER

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

FIRST CLASS

Country	Area	Value	Weight	Volume	Value
1980-1981					
Canada	100	1,000	1,000	10,000	10,000
France	100	1,000	1,000	10,000	10,000
Germany	100	1,000	1,000	10,000	10,000
Italy	100	1,000	1,000	10,000	10,000
Japan	100	1,000	1,000	10,000	10,000
United Kingdom	100	1,000	1,000	10,000	10,000
Sweden	100	1,000	1,000	10,000	10,000
Switzerland	100	1,000	1,000	10,000	10,000
Belgium	100	1,000	1,000	10,000	10,000
Netherlands	100	1,000	1,000	10,000	10,000
Australia	100	1,000	1,000	10,000	10,000
South Africa	100	1,000	1,000	10,000	10,000
Spain	100	1,000	1,000	10,000	10,000
Portugal	100	1,000	1,000	10,000	10,000
Greece	100	1,000	1,000	10,000	10,000
Turkey	100	1,000	1,000	10,000	10,000
India	100	1,000	1,000	10,000	10,000
China	100	1,000	1,000	10,000	10,000
Japan	100	1,000	1,000	10,000	10,000
United States	100	1,000	1,000	10,000	10,000
Total	100	1,000	1,000	10,000	10,000

BLM Library
Denver Federal Center
Bldg. 50, OC-521
P.O. Box 25047
Denver, CO 80225